

By Gayathri Vaidyanathan, Climate Wire

The bathroom in Rep. Peter Welch's (D-Vt.) Capitol Hill office looked ordinary as he gestured toward it with pride. It is the first in the historic Capitol Hill office buildings to use less water, he said.

A House-wide retrofitting effort, which is expected to save the federal government \$3.3 million in energy every year, is under way, and Welch's office is the first to become zero-carbon under the program. This is the latest part of the "Green the Capitol" initiative launched by House Speaker Nancy Pelosi (D-Calif.) in 2007.

Stephen Ayers, Capitol architect, recently hired Noresco, a private energy management company, to renovate the historic Rayburn, Longworth, Cannon and Ford House office buildings, as well as the House Page Dormitory. The project is expected to cost \$34 million in upgrades, and all the money will be put up by Noresco, according to Ayers. The resulting energy savings will be shared by the company and the federal government over time in a scheme that places no burden on taxpayers, he said.

"The aim is to make the House of Representatives the model of sustainability," said Dan Beard, the chief administrative officer of the Green the Capitol effort.

An energy efficiency audit undertaken prior to the program's start will provide the baseline against which future savings are measured, said Ayers. The Capitol complex pays \$52.4 million for utilities each year. The new measures should reduce energy consumption by 23 percent and water consumption by 32 percent once completed.

The Green the Capitol project aims for a 50 percent reduction in energy use over the House campus by 2017. The Energy Independence and Security Act of 2007 requires federal buildings to reduce their greenhouse gas emissions by 2030. Parts of the initiative like purchasing carbon offsets to mitigate emissions have come under criticism by Republicans.

In Welch's office, the incandescent light fittings had also been exchanged for fluorescent bulbs for greater energy efficiency. And together with other, independent initiatives, such as driving a hybrid car and purchasing offsets, Welch said he was completely carbon neutral.

The company plans to upgrade nearly 33,000 light fixtures to make them smart enough to turn off when there is excess daylight streaming in through the windows. Among other efforts, water-using fixtures will be programmed to use less, and heating and ventilation systems will be altered to make them more efficient.

"Twenty billion gallons of water per year can be saved just from bathroom upgrades," said Beard.

Kateri Callahan, president of the Alliance to Save Energy, a nonprofit group that promotes energy efficiency measures, said that the Capitol architects were "walking the talk."

"Energy efficiency is the best way to become carbon-neutral," she said. "It is good for the pocketbook, and you can become more comfortable with upgrades. This can be replicated by Americans all over America."